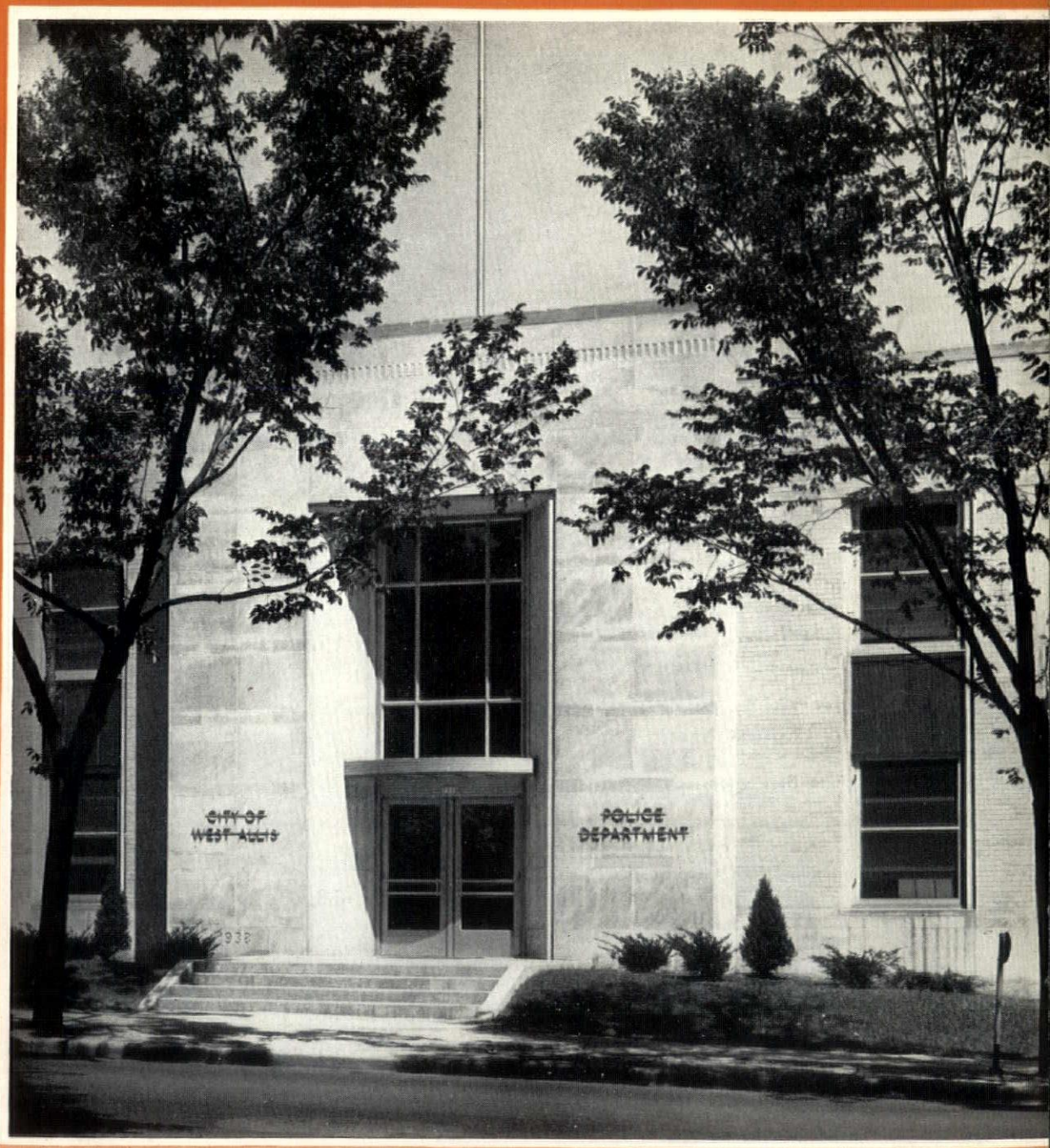
THE WISCONSIN ARCHITECT



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POINTS TO REMEMBER ABOUT MECHANIC'S LIENS UNDER WISCONSIN LAW

By GERALD J. RICE, *Attorney*

1. *Who is a contractor?* Any person or firm furnishing labor and materials under an express contract directly with an owner is a so-called "principal" contractor.
2. *Who is a sub-contractor, material-man or laborer?* A person or firm furnishing labor or materials indirectly for an owner and under contract with a contractor or sub-contractor.
3. *May an architect, civil engineer and surveyor be either a contractor or sub-contractor?* Yes.
4. *Who must give a 30-day written notice to an owner?* Sub-contractors and materialmen, but not laborers and contractors. A recent case holds that an architect is not a laborer.
5. *How is the 30-day notice to be given?* By mail or personal service, within 30 days after furnishing the first materials or labor.
6. *Is notice to one of several owners sufficient?* Yes.
7. *Can the 30-day notice be given to an owner's agent?* Yes, but only if the agent has authority to receive it. Architects and contractors are not such agents unless specially authorized.
8. *When must a contractor's claim for lien be filed?* Within six months after the date of furnishing the last labor or materials.
9. *When must a sub-contractor's, material-man's or laborer's claim for lien be filed?* Within sixty days after the *date of furnishing the last labor or materials.*
10. *Must a sub-contractor and materialman also file a copy of the 30-day notice with his claim for lien.* Yes.
11. *What must the claim for lien contain?* See forms.
12. *How long is a lien good?* For two years from the date of the furnishing of the last labor or materials; *not* two years from date of filing claim.
13. *Can a lien claim be extended?* No.
14. *Where are lien claims filed?* In the office of Clerk of Circuit Court of county where land is situated.
15. *How can a contractor or sub-contractor be guilty of embezzling funds?* By pocketing construction loan funds while there are still any undisputed lienable claims unpaid. On public jobs no distinction is made as to whether the unpaid claims are lienable.
16. *What is the penalty for wrongful use of materials without seller's consent?* $300.00 fine or 3 months in jail.
17. *Does a contractor have to defend the owner in a lien foreclosure by sub-contractors and materialmen?* Yes.
18. *Can liens be waived in advance by contract between the owner and contractor?* No.
19. *Does taking a note constitute a waiver of lien?* No, unless the note states on its face that it is given expressly as payment of the debt.
20. *Who can satisfy a filed claim for lien?* Only the claimant; not the attorney who drew the claim.
21. *Does a lien attach to public property?* No. But the funds due for payment of the public improvement are subject to a lien which is claimed by notice given to the public paying officials before the contractor is paid and enforced by an equitable fore-

closure action in the Circuit Court. Also an action can be brought against the surety on the principal contractor's bond within one year after completion.

22. *Who is an Owner?* One who owns any interest in land, whether as full owner, land contract buyer or tenant, and contracts for its improvement. Only such interest as the "Owner" has is subject to the lien.
23. *What area of land is subject to a lien?* In municipalities, one (1) acre; elsewhere forty (40) acres.
24. *As of what time does a lien attach?* As of commencement of the work of improvement.
25. *Is a mechanic's lien prior to liens of mortgages of State or Federal Building & Loan and Investment Associations?* No.
26. *Is a mechanic's lien prior to liens of other mortgages, judgment creditors, etc?* Yes, if construction is commenced before the judgment is entered or the mortgage is recorded, unless the lien claimant had knowledge of the mortgage before commencing work.
27. *Has seller a mechanic's lien on machinery installed?* Yes.
28. *Must the contract between owner and contractor be in writing?* No, but it must be a clear-cut or "express agreement."
29. *Must a contractor furnish name of owner and description of property to material-men and sub-contractors?* Yes.
30. *Is a lien assignable?* Yes.
31. *Can a creditor of a contractor garnishee an owner?* Yes.
32. *Does one lien claimant have any priority over another?* No. If on a foreclosure, the proceeds bring less than the full amount necessary to pay all liens, then all lien claimants share pro-rata.
33. *Does a waiver of lien given for a partial payment discharge the full lien right?* Usually not. However, this is a close question and the form of the waiver should be checked with competent counsel. Usually a waiver of lien to a certain date is unsatisfactory. The recommended practice is that the waiver should state on the face of it the amount of money received and that the waiver discharges the lien right only to the extent of such payment received. In the case of a laborer's waiver of lien, the architect should always insist that the waiver state the days and hours of employment as well as the exact amount received by the laborer. This is particularly important where an owner has selected a carpenter or a mason contractor on the basis of a low bid without regard to the contractor's reputation for financial responsibility and contrary to the architect's advice.

PLEASE NOTE: Inasmuch as the mechanic's lien laws are subject to frequent change and interpretation, the writer urges that the advice of competent counsel be sought on any lien question. The foregoing questions and answers cannot be more than an introduction to a highly technical subject.

GRIEVANCE

One of the things about which I'm
Inclined to get a little surly—
Whenever I'm having a wonderful time
Why does it have to get late so early?
—MAY RICHSTONE

CEMENT DISPERSION

EDWARD W. SCRIPTURE, JR., Ph.D.

Concrete construction on many defense projects is being speeded up through cement dispersion. Engineers, architects, contractors and those connected with the various phases of construction are well acquainted with the many improvements made in the manufacture of portland cement since its introduction. They are familiar with the facts that better design of mixes and more care in the selection of aggregates have vastly increased the quality of concrete and mortar, but they are also aware that an important problem having to do with workability and durability and the other properties of concrete remained to be solved: the reduction of excess water necessary to place concrete. The vital need for this improvement has been seen for a long time.

Recently there was announced a new principle for the improvement of concrete and mortar — Cement Dispersion. Research engineers have spent ten years in proving that by adding to the concrete or mortar mix a cement dispersing agent the basic problem of all cement mixes is attacked, namely, the excess water required for placeability. Reduction of this water insures improvement of the properties of the concrete with respect to workability, watertightness, strength and other important qualities.

ACTION OF DISPERSING AGENT

When incorporated in an aqueous medium, the particles of a solid tend to agglomerate and act as large clumps rather than as individual particles. This is known as a flocculated condition and is due to the absence of electrostatic charges on the particles so that when they collide they tend to stick together. If a dispersing agent is incorporated in the flocculated solid-liquid system then the agglomerates or clumps tend to be broken up and the solid particles are distributed more or less evenly through the aqueous medium in the form of individual or discrete particles. The system is then said to be deflocculated or dispersed. The action of the dispersing agent is caused by its orientation with respect to the solid particles whereby these are endowed with electrostatic charges of like sign so that when they collide they are mutually repelled and do not tend to stick together. This effect may also be enhanced by the action of the dispersing agent as a protective colloid which prevents the particles coming in close contact with one another.

The operation of dispersing agents has been known and utilized for a long time with respect to some applications: for example, in the ceramic industries for the deflocculation of clay slips. Until recently no dispersing agents have been known which were applicable to the deflocculation of portland cement. Recent researches have shown that certain complex organic compounds will disperse cement and will not have injurious effects such as a lowering of surface tension causing foaming or interference with the hydration reactions of the cement.

The action of a cement dispersing agent on portland cement in water is similar in its effects to the action of any dispersing agent in a solid-liquid system.

EFFECTS UPON CONCRETE

The dispersion or deflocculation of portland cement in a concrete or mortar mix is important in a number of aspects. In general it may be pointed out that the reactions on which portland cement depends for its valuable properties are surface reactions. They are, therefore, a function of the surface area of the cement. For this reason cement manufacturers have consistently increased the fineness of the ground cement clinker. Unfortunately, the full surface area produced by fine grinding is not available for reaction because of the flocculated condition of the cement in the mix. It is perhaps even more unfortunate that this agglomerating tendency is even greater with greater fineness, so that the beneficial effects of fine grinding have been in some measure offset by the formation of clumps. The addition of a dispersing agent to portland cement mixes has, for the first time, made available for reaction the full surface area of the cement particles. A dispersing agent in a cement mix, therefore permits utilization of the cement to the full extent.

The effects of dispersion of the cement particles on plastic concrete or mortar are:

1. More placeable concrete with less water.
2. Increased fattiness.
3. Reduced segregation and bleeding.
4. Greater water retentivity.
5. Reduced shrinkage before hardening.
6. Greater economies.

On the hardened concrete the more important results of the dispersing action are:

1. Increased durability and longer life.
2. Increased watertightness.
3. Higher strength.
4. Lower volume change.
5. Lower permeability or absorption.
6. Greater uniformity and freedom from gross defects.

RESULTS OF APPLICATION

This principle of dispersion has been widely applied in practical construction. Through the greater placeability and high strengths at all ages, many large defense projects have been both improved and speeded up. In the construction of dome structures, such as igloos for ammunition storage, the problems of bleeding and segregation are particularly acute and in many cases have been solved by the application of cement dispersion.

The use of a cement dispersing agent has quite generally proved economical. Savings in construction cost, are by this means, effected by the greater ease of placing, by the reduced finishing and patching required, by improved mix design, by greater speed in stripping forms and by the shorter curing period required. An interesting example of the savings effected under certain conditions is the reduction by cement dispersion in water required where it has been necessary to transport or purify the water used in the concrete, as in acid regions or on island bases.

AIR RAID PRECAUTIONS FOR THE PROTECTION OF WINDOWS*

The experience and extensive research of the British have shown certain methods for the protection of windows against bombing to be particularly effective. A survey of air raid casualties shows that a large proportion of personal injuries is caused by splinters of flying glass. The primary objective of this discussion is to outline methods for reducing injuries of this type. There is no method of preventing the fracture of window or plate glass under blast or impact. Certain types of flat glass, such as tempered glass, laminated safety glass, and wire glass enjoy greater resistance than ordinary glass and should be considered in making replacements in locations which it is important to keep glazed. When a pane breaks under severe blast, pieces may be scattered violently, although it is impossible to predict whether they will be thrown inward or outward.

Plate glass in internal partitions, show cases and similar locations is almost as liable to fracture and to dangerous scattering as glass in external windows. Plate glass in doors, and in sliding or hinged windows, is somewhat less vulnerable than in fixed windows, provided the door or window allows some degree of movement. The decrease in risk does not warrant the omission of protective measures, except in the case of tempered glass. It is desirable to fasten all doors, whether containing glass or not, wide open during air raids and generally to open windows.

Since it is not practicable to prevent entirely the fracture of commercial glass in fixed openings, efforts should be directed towards minimizing the results of breakage. This may be accomplished in various ways. In all cases, whatever protective means is used should also be securely fastened to the frame or other construction supporting the glass.

An adhered-fabric treatment does not make the breakage of glass less likely, but, if appropriate to the weight and size of glass, it affords a useful measure of protection against the scattering of fragments. A suitable adhesive, such as cellulose nitrate lacquer, may be brushed on the glass and when it has become tacky, a sheet of fabric or strong textile netting is pressed into the adhesive so that the whole glass area is covered; the fabric should also overlap the frame and be fastened to it. When the material is thoroughly set, a coat of lacquer or varnish is applied over the whole. To retain a reasonable amount of transparency, but at some sacrifice to protection, textile strips can be used. Strips should be not less than 1½ inch wide and interspaces between strips should not be more than 2 to 4 inches each way. The ends of the textile strips or tape should be securely fastened to the frames. The stronger the textile and adhesive, the better the results. Almost any reasonably strong textile fabric such as cheese cloth, muslin or lace netting will afford the requisite minimum degree of protection if well stuck to the glass and also to the surrounding frame. No adhered-fabric method is suitable for rough or configurated glass surfaces.

Sodium silicate adhesives or water glass should *never* be used, because, although they give excellent adhesion, the glass will be permanently etched when the coating is removed. For the same reason, animal glue should not be used. Various adhesives have been used

* Pittsburgh Plate Glass Company, Pittsburgh, Pennsylvania.

with greater or less success. Cellulose nitrate lacquer is very satisfactory and readily available. Glycerine glues and ordinary flour paste have been used satisfactorily. Varnish has been used as an adhesive to a considerable extent, but it has been found to lose its adhesiveness and hence protective value in a few months. Rubber latex adhesives suffer a similar deterioration.

A good degree of protection is afforded by the use of sheets or strips of transparent plastic provided that adequate thickness is used and that it is suitably stuck in place. Plastic film should be at least 0.002 inch thick. A mucilage of gum arabic containing 10 to 15 per cent of glycerine is satisfactory with cellulose film. Cellulose film needs to be varnished after application to make it waterproof and mildew resistant. A fair adhesive for cellulose acetate film is composed of rosin plasticized with about 50 per cent of castor oil and suitably thinned with methanol.

Liquid coatings and paper strip are not recommended because of their lack of strength in resisting flying glass fragments.

Protection of external plate glass of a storefront where the display spaces are backed by wooden panelling, if this is substantial and well braced and extends to the top of the glass, is effective. If greater protection and transparency are desired, a well framed and supported wall of glass block gives adequate protection. The maximum protection will be obtained by installing a solid masonry wall. Boarding up external display windows on either side affords protection against the weather and pilfering. Since boarding on one side only gives little protection against the scattering of glass fragments on the opposite side, this treatment is inadequate.

Wire netting of ½ inch mesh will stop all but the smallest fragments of broken glass. Expanded metal of similar size mesh gives equal protection, but less transparency. The netting must be securely fastened, that is by firm stapling or strongly nailed battens either to the window frame or preferably to removable wooden frames. Maximum protection is afforded if these frames are hung freely so that they may swing away from the glass and thus lengthen the time during which they are absorbing the blow. The netting should be as close to the glass as possible without touching it. Netting of larger mesh than ½ inch has much less effect in arresting flying glass fragments and should not be used.

Curtains give *only a moderate* degree of interior protection against flying glass fragments. Two or three layers of burlap hanging loosely or attached to a swinging frame may be employed instead of more expensive curtain material.

A bracing device to prevent vibration of the glass may increase liability of fracture. An important objection to a brace is that it may give the owner a sense of false security, blinding him to the need for providing against the danger of flying glass. This danger is in no way eliminated by a bracing device.

Factory roof glazing requires adequate protection because of shutdown which might be required by destruction of blackout or exposure of the plant to the weather. External treatment of the glass with burlap and bitumen maintains temporary weather portection after the glass is fractured. If the glass is also supported by wire mesh close underneath or by metal or wood transverse supports at about 2 foot intervals touching the glass, weather protection is permanent.

News

The latest check up on our boys and girls discloses that Wisconsin is well represented in the East.

The following is a list of Architects and draftsmen working in Wilmington, Delaware for Mason and Hanger Co., who are designing the plant for the Hercules Powder Co. to be built at Merrimac, Wisconsin: Carl L. Ames, Willets Leenhauts, John J. Jacoby, Wm. P. Krause, Frederick Von Grossman, architects of Milwaukee. Julius Sandstadt of Oshkosh, Joseph G. Durrant of Boscobel and Paul A. Kilp of Green Bay, architects and Herbert Haebesh, Lillian Scott, Art Rehman, Ray Zaumeyer, Chas. Burrows. We wish them well.

Gebhard New Head of Building Congress

J. P. Gebhard of Gebhard-Berghammer, Inc., was elected president of the Building Congress of Wisconsin at the annual meeting at the Milwaukee Elks club. He succeeds A. C. Eschweiler, Jr., who was elected to the board of directors with A. S. Fredrickson and George F. Eller.

Other officers named were Walter H. Oleson, J. C. Staff and William T. Dortch, vice-presidents; Walter G. Memmler, secretary, and Otto A. Waskow, treasurer.

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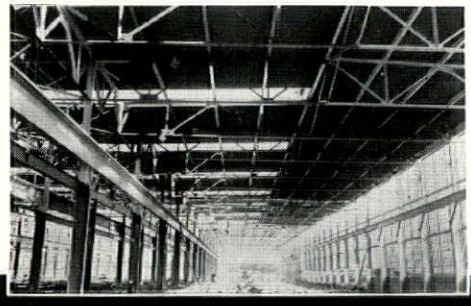

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